WHAT IS CLAIMED IS:

1. A method for applying a protective coating for a stent delivery system, comprising:

selecting a dissolvable or degradable polymer;

dissolving said polymer into a solvent to make a solution;

applying said solution to the surface of the stent delivery system comprising a stent and an expandable member;

allowing said solution to air cure to form a coating around the stent and the expandable member, wherein said stent and said expandable member are bonded together.

2. The method of claim 1 wherein the polymer is dissolvable in blood.

3. The method of claim 1, wherein the solution is manually applied to the stent and the expandable member.

4. The method of claim 1, wherein the solution is applied by controlled spray-coating.

5. The method of claim 1, wherein the solution is applied by a dipping process.

6. The method of claim 1, wherein the thickness of the coating is from about 0.001 inches to 0.0015 inches.

7. The product formed by the process of Claim 1.

8. The method of Claim 1, wherein said polymer is selected from a group consisting of polyvinyl pyrrolidone, polyethylene glycol, polyethylene oxide, polyethylene acetate, polyvinyl alcohol, polyacrylic acid, polymethacrylic acid, polyacrylamide, hydrophilic soft segment urethane, gum Arabic, gum tragacanth, C6-ceramide, or any combination thereof.

9. The method of Claim 1, where said coating further comprises a compound selected from the group consisting of antithrombotics, anticoagulants, antimitogens, antimitotoxins, antisense oligonucleotides, gene therapy vehicles, nitric oxide, growth factors and inhibitors, hirudin, hirugen, hirulog, D-Pro-Phe-Arg chloromethyl ketone (PPACK), D-phenylalanyl-L-prolyl-L-arginyl chloromethyl ketone (FPRCH2Cl), heparin, C6-ceramide and warfarin.

10. A stent delivery system, comprising:

an elongated catheter having a proximal and distal end portion and an expandable member disposed along the distal end portion of the elongated catheter, said expandable member being coupled to an expansion actuator;

a stent which is adjustable between a first collapsed diameter and at least a second expanded diameter, comprising a tubular member having a length and a diameter, and comprising a series of sliding and locking radial elements, and at least one articulating mechanism which permits one-way sliding of the radial elements from the first collapsed diameter to the second expanded diameter but inhibits radial recoil from the second expanded diameter, wherein said stent is disposed in its collapsed state over the expandable member on the elongated catheter; and

a degradable polymeric coating selected from a group consisting of polyvinyl pyrrolidone, polyethylene glycol, polyethylene oxide, polyethylene acetate, polyvinyl alcohol, polyacrylic acid, polymethacrylic acid, polyacrylamide, hydrophilic soft segment urethane, gum Arabic, gum tragacanth, or any combination thereof, wherein said polymeric coating holds said stent on said expandable member.

11. The stent delivery system of Claim 10, where said coating further comprises a compound selected from the group consisting of antithrombotics, anticoagulants, antimitogens, antimitotoxins, antisense oligonucleotides, gene therapy vehicles, nitric oxide, growth factors and inhibitors, hirudin, hirugen, hirulog, D-Pro-Phe-Arg chloromethyl ketone (PPACK), D-phenylalanyl-L-prolyl-L-arginyl chloromethyl ketone (FPRCH2Cl), heparin, C6-ceramide and warfarin.

12. The stent delivery system of Claim 10, wherein each radial element comprises at least one elongated rib disposed between first and second end portions.

13. The stent delivery system of Claim 12, wherein the radial elements alternate between radial elements having an odd number of elongated ribs and radial elements having an even number of elongated ribs.

14. The stent delivery system of Claim 13, wherein the radial elements alternate between radial elements having one elongated rib and radial elements having two elongated ribs.